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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,352	02/22/2002	Charles Calvin Byers	49	9766

7590 09/21/2005

Docket Administrator (Room 3J-219)  
Lucent Technologies Inc.  
101 Crawfords Corner Road  
Holmdel, NJ 07733-3030

EXAMINER

PENDLETON, BRIAN T

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/081,352	<b>Applicant(s)</b> BYERS, CHARLES CALVIN	
	<b>Examiner</b> Brian T. Pendleton	<b>Art Unit</b> 2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15 and 16 is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Allowable Subject Matter***

The indicated allowability of claim 7 is withdrawn in view of reinterpretation of the cited references. Rejections based on the newly cited reference(s) follow.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 13, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Neuhaus et al, US Patent 5,012,221. Neuhaus discloses an emergency vehicle audible warning system comprising amplifiers 13, loudspeakers 14, and DSP 1. As disclosed in column 7 lines 9-24 and column 8 line 36 – column 10 line 20, the frequency, phase and amplitude of the signals change as the vehicle advances toward a geographic zone. Claims 1 and 14 are met. As to claim 5, ROM 7 is the database of signals. Regarding claim 13, there is operator control panel 2.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neuhaus et al in view of Welk,. Neuhaus does not disclose that the audible signal generator

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includes a location determination device connected to the digital signal processor and configured to calculate a determined pattern. In the same field of audible warning, Welk discloses a rail way crossing collision avoidance system comprising GPS 12 and transmitter 14 located on a train 10, railroad crossing monitor 13 having a receiver , processor and transmitter for transmitting audible alarm signals to a vehicle 11 via receiver 15. As disclosed in the abstract and column 4 lines 10-40, the location of the train determines the level of the alarm signal transmitted by the crossing monitor 13. The advantage of this feature was to indicate how close a train is to a crossing with specific accuracy through different audible cues. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the GPS location feature with different levels of alarm signals, as taught by Welk, in apparatus of Neuhaus for the purpose of imparting more pertinent oncoming emergency vehicle information to a driver. Claims 2-4 are met. Per claim 8, Welk also discloses determining the level of alarm signals according to the train's velocity using element 24 which is a motion detector. As to claim 11, sensor 34 is used to modify the alarm level according to the weather condition, which is based on temperature.

Claims 6, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neuhaus. Neuhaus does not disclose that the plurality of signals are stored as PCM data. However, it was well known to store waveforms as PCM data at the time of invention with the benefit of high capacity storage of waveforms in small memory. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use PCM data for the audible sounds in the invention of Neuhaus for the purpose of saving memory space. As to claim 10, one of ordinary skill in the art would have known that traffic patterns vary according to the time of

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day. An emergency vehicle navigating the streets during a busy hour would have required a different audible alert (likely louder) than when navigating the streets during a quiet hour. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the amplitude of the audible warning sounds of Neuhaus based on the time of day since that parameter was relevant to drivers. As to claim 12, it was obvious to use class D amplifiers as they reduce power consumption.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neuhaus in view of Anderson. Neuhaus does not disclose a position detector wherein the DSP is configured to select one of a plurality of signals responsive to the position detector. Anderson discloses a railroad crossing warning system comprising a plurality of control units 30 having horns 56. Inherently the horns (loudspeakers) 56 are coupled to high power amplifiers shown in figure 10. The control units 30 have a control box 58 which is a digital signal processor (see column 6 lines 24-36). As discussed in column 2 lines 43-60, the controller controls the amplitude of the audible horns. There is disclosed XR and IR, which represent crossing relay and island relay signals that determine the position of the train 20 and are used by the controller to select an audible signal. It was beneficial to determine the position of an oncoming vehicle utilizing an alert system and configure the alert sound signals in accordance with position since the change in alert sound signals would indicate urgency. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Neuhaus to include a position detector, as taught by Anderson, for the purpose of controlling the urgency content of audible warning sounds for a driver.

***Allowable Subject Matter***

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Claims 15 and 16 are allowed.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). The amendment to claim 1 is not a result of incorporating the limitations of claim 7, intervening claim 2 and original base claim 1 into an independent claim, as required by the previous Office Action. Therefore, the amendment necessitates a new ground of rejection using the Neuhaus reference.

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Pendleton whose telephone number is (571) 272-7527. The examiner can normally be reached on M-F 7-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian T. Pendleton  
Examiner  
Art Unit 2644



btp



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SUPERVISORY PATENT EXAMINER  
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